



- c) Myometrium
- d) Endometrium

Q.17 Sperms are produced in:

- a) Vas deferens
- b) Collecting duct
- c) Epididymis
- d) Seminiferous tubules

Q.18 Hormones called gonadotropins are released by which gland?

- a) Ovaries
- b) Hypothalamus
- c) Pituitary
- d) Testes

Q.19 Which of the following is found at the end of long bones, in the nose, larynx, and trachea?

- a) Elastic cartilage
- b) Fibrous cartilage
- c) Perichondrium
- d) Hyaline cartilage

Q.20 A muscle with characters like a spontaneous contraction, one nucleus per cell, and no control over contraction is most likely:

- a) Smooth muscle
- b) Cardiac muscle
- c) Skeletal muscle
- d) Visceral muscle

Q.21 "Ball and socket" joint is present at:

- a) Shoulder
- b) Wrist
- c) Elbow
- d) Knee

Q.22 Which human body function is NOT controlled through negative feedback mechanism?

- a)) Body temperature
- b) Glucagon production
- c) Labor contraction
- d) Parathyroid activity

Q.23 Gray matter of spinal cord does not contain:

- a) Cell bodies of sensory neurons
- b) Cell bodies of interneurons
- c) Axons of interneurons
- d) Cell bodies of motor neurons

Q.24 In term of enzyme action, maximum temperature refers to a temperature at which?

- a) Enzymes start to denature
- b) Enzymes start to re-nature
- c) Enzymes work best
- d) Enzymes are reactivated

Q.25 In enzymatic activity, the term "feedback inhibition" is used when:

- a) Enzyme is inhibited by the product being produced
- b) Enzyme works normally for regulatory mechanism
- c) Enzyme remains unaffected by product concentration
- d) Enzyme is inhibited irreversibly

Q.26 The chemical which regulates the enzymatic activity is:

- a) Activator
- b) Inhibitor
- c) Substrate
- d) Both A and B

Q.27 At temperature higher than optimum, enzymatic activity decreases because of:

- a) Saturation
- b) Inhibition
- c) Denaturation
- d) Composition

Q.28 Which of the following ideas was not part of Charles Darwin's theory of evolution by natural selection?

- a) Organisms produce more off springs than the environment can support
- b) Variation between individuals arises by gene mutation
- c) Only those individuals best adapted by environment survive and reproduce
- d) Individuals compete for scarce resources

Q.29 Evolution of kiwi, food of modern horse, webbed feet of duck, and loss of teeth in whale were all explained in detail by:

- a) Lamarck
- b) Darwin
- c) Weismann
- d) De Vries

Q.30 Which of the following is NOT TRUE about interferons?

- a) Belong to cytokines
- b) Activate natural killer cells
- c) Activate immune cells
- d) Secrete interleukin



Q.31 Intrinsic factor secreted by parietal cells of stomach mucosa helps in:

- a) Vitamin B₁₂ absorption
- b) Protein digestion
- c) Carbohydrate breakdown
- d) Bowel movement

Q.32 Major volume of gastric juices is produced in stomach by:

- a) Sensation of taste
- b) Smell of food
- c) Presence of protein food in stomach
- d) Sight of food

Q.33 Which one is NOT a metabolic role of liver?

- a) Glycogenolysis
- b) Gluconeogenesis
- c) Deamination
- d) Immunoglobulin synthesis

Q.34 The enzyme which is NOT produced by the pancreas during digestion is:

- a) Lipase
- b) Trypsin
- c) Pepsin
- d) Amylase

Q.35 The heart chamber from where the aorta originates is the:

- a) Left ventricle
- b) Right ventricle
- c) Left atrium
- d) Right atrium

Q.36 Lymphatic system contains all of the organs/structures except:

- a) Lymphoid masses
- b) Lymph vessels
- c) Spleen
- d) Lungs

Q.37 The smaller (40S) of ribosome combines with larger subunit (60S) in the presence of Mg ion to form _____ particle.

- a) 100 S
- b) 90 S
- c) 80 S
- d) 70 S

Q.38 The natural bacterial flora is beneficial to humans because they:

- a) Interfere with pathogenic colonization
- b) Develop resistance against antigens

- c) Develop resistance against physical agents
- d) Produce antibiotic against pathogens

Q.39 In bacteria, the resistance against heat is provided by:

- a) Granules
- b) Cysts
- c) Spores
- d) Plasmids

Q.40 These hormones perform antagonistic function EXCEPT:

- a) Growth Hormone – Somatostatin
- b) Calcitonin – Parathyroid
- c) Adrenaline – Noradrenaline
- d) Insulin – Glucagon

Q.41 Virus recognize host through:

- a) Envelope
- b) DNA
- c) Capsid
- d) Protein Coat

Q.42 Cell surface markers are

- a) Lipoproteins
- b) Glycolipids
- c) Sphingolipids
- d) Glycoproteins

Q.43 Porins are present in:

- a) Mitochondria and golgi apparatus
- b) Mitochondria and chloroplast
- c) Mitochondria and ribosomes
- d) Golgi apparatus and chloroplast

Q.44 The role of parietal cells of mucosa is:

- a) Protein digestion
- b) HCl secretion
- c) Protein absorption
- d) HCl inhibition

Q.45 Structure present in both prokaryotes and eukaryotes:

- a) 80s ribosomes
- b) Cell wall
- c) Cell membrane
- d) Golgi apparatus

Q.46 Which organelle has hydrolytic enzymes?

- a) Endoplasmic reticulum
- b) Ribosomes



- c) Lysosomes
- d) Cell wall

- c) Motor pathway
- d) Somatosensory pathway

Q.47 Number and sequence of amino acids is determined by:

- a) Primary structure
- b) Secondary structure
- c) Tertiary structure
- d) Quaternary structure

Q.48 Water is a solvent due to:

- a) Surface tension
- b) Polarity
- c) Heat capacity
- d) Viscosity

Q.49 Carbohydrates contain:

- a) Carbon, nitrogen, and potassium
- b) Carbon, hydrogen, and chlorine
- c) Carbon, nitrogen, and oxygen
- d) Carbon, hydrogen, and oxygen

Q.50 Most of RNA is present in:

- a) Cell membrane
- b) Cytoplasm
- c) Nucleolus
- d) Lysosomes

Q.51 Turgidity in plants is maintained by:

- a) Wall pressure
- b) Internal pressure
- c) Vacuole
- d) Osmotic pressure

Q.52 Chlorophyll pigments are present in:

- a) Chloroplast
- b) Chromoplast
- c) Elaioplast
- d) Amyloplast

Q.53 Xanthophylls are which pigment?

- a) Yellow
- b) Red
- c) Orange
- d) Green

Q.54 Pathway from receptor to effector in which conscious part of brain is not involved is the:

- a) Reflex arc
- b) Sensory pathway

Q.55 Which of the following organelles has its own DNA?

- a) Endoplasmic reticulum
- b) Lysosomes
- c) Mitochondria
- d) Ribosomes

Q.56 Which organelle performs a role in cell wall formation?

- a) Ribosomes
- b) Cell membrane
- c) Plasmids
- d) Golgi apparatus

Q.57 Steroids synthesis occurs in:

- a) Rough endoplasmic reticulum
- b) Smooth endoplasmic reticulum
- c) Golgi apparatus
- d) Ribosomes

Q.58 The master gland in the human body is:

- a) Pituitary gland
- b) Thyroid gland
- c) Parathyroid gland
- d) Mammary gland

Q.59 End product of light reaction of photosynthesis is:

- a) ADP and NADPH
- b) ATP and NADPH
- c) Carbon dioxide and water
- d) NADPH and AMP

Q.60 Definition of hydrolysis:

- a) Combining of molecules due to reaction with hydrogen
- b) Combining of molecules due to reaction with water
- c) Breaking of molecules due to reaction with water
- d) Breaking of molecules due to reaction with hydrogen

Q.61 Which of following is a structural protein?

- a) Pepsinogen
- b) Casein
- c) Enzyme
- d) Collagen

Q.62 Transmission of impulse is done by:



- a) Smooth endoplasmic reticulum
- b) Rough endoplasmic reticulum
- c) Golgi apparatus
- d) Ribosomes

Q.63 The pH of human blood is:

- a) 7.45 to 7.55
- b) 7.35 to 7.45
- c) 7.15 to 7.25
- d) 7.25 to 7.35

In an X-linked recessive disease, a affected woman married to a normal man, the percentage of affected daughters is:

Q.64

- a) 0%
- b) 25%
- c) 50%
- d) 100%

The number of ATP used to produce 1 glucose in Calvin cycle is:

Q.65

- a) 18
- b) 27
- c) 9
- d) 36

Q.66 Which part of virus has glycoproteins?

- a) Spikes
- b) Envelope
- c) Capsid
- d) DNA

Which hexose is most important from a biological point of view?

Q.67

- a) Mannose
- b) Fructose
- c) Glucose
- d) Lactose

Chromosomes that are same in male and female are called:

Q.68

- a) X chromosomes
- b) Y chromosomes
- c) Sex chromosomes
- d) Autosomes

Q.69 In the light reaction, water is used in:

- a) Reduction
- b) Oxidation
- c) Photolysis
- d) Oxygenation

Light reaction takes place in which part of the chloroplast?

Q.70

- a) Thylakoid
- b) Stroma
- c) Lamella
- d) Membrane

Which of the following attaches bones to muscles?

Q.71

- a) Ligaments
- b) Cartilage
- c) Membranes
- d) Tendons

The outer most living boundary of the cell is:

Q.72

- a) Cell wall
- b) Cell membrane
- c) Cytoplasm
- d) Nuclear membrane

The sensation of pain is produced by:

Q.73

- a) Thermoreceptor
- b) Photoreceptor
- c) Chemoreceptor
- d) Nociceptor

The resting membrane potential is:

Q.74

- a) -70 mV
- b) -60 mV
- c) -50 mV
- d) -40 mV

Which neurotransmitter is present in the peripheral nervous system?

Q.75

- a) Epinephrine
- b) Acetylcholine
- c) Dopamine
- d) Serotonin

Most ideal gas in the following is:

Q.76

- a) H₂
- b) He
- c) N₂
- d) CO

Two ice blocks stick together due to:

Q.77

- a) London dispersion Forces
- b) Dipole dipole forces
- c) Hydrogen bonding
- d) All of the above options are correct



Q.78 Unit of rate constant is same as for:

- a) First order reaction
- b) Second order reaction
- c) Third order reaction
- d) Zero order reaction

Q.79 Reduction occurs at:

- a) Anode
- b) Cathode
- c) Salt bridge
- d) None of these options are correct

Q.80 Which increases down the group for alkali metals?

- a) Electron affinity
- b) Reactivity
- c) Ionization energy
- d) All of the above options are correct

Q.81 Electron affinity decreases down the group due to:

- a) Increase in atomic radius
- b) Decrease in atomic radius
- c) Increase in electronegativity
- d) All of the above options are correct

Q.82 It is impossible for two electrons to have same value of spin quantum number in the same orbital, according to:

- a) Hund's rule
- b) Aufbau principle
- c) Pauli's exclusion principle
- d) All of the above options are correct

Q.83 Which one is least ionic?

- a) NaCl
- b) $AlCl_3$
- c) $MgCl_2$
- d) KCl

Q.84 Diamond is:

- a) Covalent solid
- b) Molecular solid
- c) Metallic solid
- d) Ionic solid

Q.85 Ideal gas equation is:

- a) $P = nRT$
- b) $PV = RT$
- c) $nRTP$
- d) $PV = nRT$

Q.86 How many moles of CO contain 16g of oxygen?

- a) 5 mol
- b) 16 mol
- c) 0.5 mol
- d) 2 mol

Q.87 Stoichiometry is:

- a) Relationship between quantities of substances in a chemical reaction
- b) Relationship between concentration of substances
- c) Relationship between amount of substances in a chemical equation
- d) All of the above options are correct

Q.88 What is the most common gas in the environment?

- a) N_2
- b) CO_2
- c) O_2
- d) He

Q.89 Proton is how many times heavier than an electron?

- a) 1842
- b) $1/1836$
- c) 1836
- d) 1840

Q.90 Which quantum number tells shape of the orbital?

- a) Magnetic quantum number
- b) Spin quantum number
- c) Azimuthal quantum number
- d) Principle quantum number

Q.91 The number of electrons in the p subshell is:

- a) 2
- b) 14
- c) 10
- d) 6

Q.92 Which one of the following has greater bond energy?

- a) HF
- b) HCl
- c) HBr
- d) HI

Q.93 Oxidation number of an element in free state is:

- a) 1



- b) 2
- c) 0
- d) -1

- b) Halogenation
- c) Nitration
- d) Iodoform

Q.94 Which of the following is light as a feather and strong as iron?

- a) Graphene
- b) Graphite
- c) Diamond
- d) Mercury

Q.102 50% NaOH is used in:

- a) Aldol condensation reaction
- b) Cannizaro reaction
- c) Clemenson condensation reaction
- d) Wolfkishner reaction

Q.95 The maximum density of water is at:

- a) 2.98°C
- b) 3.98 °C
- c) 4 °C
- d) 4.98 °C

Q.103 Carboxylic acids are soluble in water due to:

- a) Dipole dipole forces
- b) London dispersion forces
- c) Hydrogen bonding
- d) Covalent bonding

Q.96 Homocyclic hydrocarbons are further divided into:

- a) Alicyclic and aromatic
- b) Carbocyclic and heterocyclic
- c) Acyclic and heterocyclic
- d) Heterocyclic and aromatic

Q.104 Esterification occurs in the presence of:

- a) Aldehydes and ketone
- b) Alcohols and ketone
- c) Carboxylic acid and alcohols
- d) Carboxylic acid and aldehydes

Q.97 Which contains sp_2 hybridization?

- a) Methane
- b) Ethane
- c) Alkyne
- d) None of these options are correct

Q.105 Benzene can be prepared from sodium benzoate by reaction with:

- a) $AlCl_3$
- b) NaOH
- c) Chlorobenzenes
- d) Cumene

Q.98 Formula of wood spirit is:

- a) C_2H_5OH
- b) CH_3OH
- c) HCHO
- d) CH_3COO

Q.106 Empirical formula is related to molecular formula by:

- a) Molecular formula = empirical formula/n
- b) Molecular formula = n(empirical formula)
- c) Molecular formula = $2n$ (empirical formula)
- d) Molecular formula = n + empirical formula

Q.99 Geometric isomerism is shown by:

- a) Alkanes
- b) Alkenes
- c) Alkynes
- d) All of the above options are correct

Q.107 Which one is more reactive among halogens?

- a) F_2
- b) Cl_2
- c) Br_2
- d) I_2

Q.100 CHO is the general formula of:

- a) Alcohols
- b) Ketones
- c) Carboxylic Acid
- d) Ethers

Q.108 One calorie is equal to:

- a) 4.18 kJ
- b) 4.18 J
- c) 18 J
- d) 18 kJ

Q.101 Alcohols and phenols can be differentiated by which reaction?

- a) Lucas test

Q.109 The net enthalpy change in a chemical reaction is same whether it is brought about in two



or more different ways in one or several steps.
It is known as:

- a) Joule's law
- b) Law of conservation of energy
- c) Hess's law
- d) Henry's law

Q.110 Which is not true about rate of reaction?

- a) It is independent of concentration of reactants.
- b) It depends upon the temperature.
- c) It does not depend upon the order of reaction.
- d) All of the above options are correct.

Q.111 Which one is a s block element?

- a) B
- b) K
- c) Al
- d) Cu

Q.112 Water is a universal solvent due to:

- a) London dispersion forces
- b) Hydrogen bonding
- c) Dipole dipole forces
- d) Covalent bonding

Q.113 Bond angle is 120° in:

- a) Ethane
- b) Ethyne
- c) Ethene
- d) Cyclopropane

Q.114 The time rate of change of velocity is called:

- a) Force
- b) Acceleration
- c) Power
- d) Energy

Q.115 In projectile motion, the range of projectile will be maximum at an angle of

- a) 30 degrees
- b) 45 degrees
- c) 80 degrees
- d) 90 degrees

Q.116 Which of the following is not true?

- a) Momentum is quantity of motion
- b) Unit of momentum is N.s
- c) Momentum is not a vector quantity
- d) Momentum is product of mass and velocity

Q.117 In perfect elastic collision

- a) Only momentum is conserved
- b) Only total energy is conserved
- c) Only kinetic energy is conserved
- d) Momentum, kinetic energy, and total energy is conserved

Q.118 The slope of displacement-time graph is:

- a) Velocity
- b) Displacement
- c) Acceleration
- d) Distance

Two stones, 10kg and 50kg fall through 80m high cliff. Which stone has greater velocity at bottom? (ignoring air resistance) ($g=10\text{ms}^{-2}$)

Q.119

- a) 10kg
- b) 50kg
- c) Both have same velocity
- d) Cannot be calculated

How much work is done by force of gravity in pulling a stone of weight 10N from the top of 250m high cliff to the foot of cliff?

Q.120

- a) 250J
- b) 25J
- c) 2500J
- d) 25,000J

When the speed of your car is halved, by what factor does its kinetic energy decrease?

Q.121

- a) $1/2$
- b) $1/4$
- c) $1/8$
- d) $1/6$

If by some phenomenon the Earth contracts to one half of its present size, then the value of gravitational potential energy becomes:

Q.122

- a) Double
- b) One-half
- c) Remains the same
- d) Four times

Q.123 The product of force and velocity is:

- a) Kinetic energy
- b) Potential energy
- c) Power
- d) Work done

Q.124 One degree is equal to:

- a) 0.1 radian



- b) 0.15 radian
- c) 0.0175 radian
- d) 0.275 radian

Q.125

An object moving along a circular path of radius 1m. It covers a distance of 2m along the circumference of the circle. What will be the angular displacement covered by it?

- a) $1/2$ radian
- b) 2 radian
- c) 3 radian
- d) $2/3$ radian

Q.126

If we double, both the speed of the body and radius of the circular path, the centripetal force will be:

- a) Same
- b) Double
- c) 4 times
- d) 8 times

Q.127

Relationship between angular and linear velocity is:

- a) $\omega = rv$
- b) $v = r\omega$
- c) $\omega = v/r^2$
- d) $v = \omega/r$

Q.128

In a ripple tank 100 waves pass through a certain point in one second. If the wavelength of the wave is 1cm then the speed of the wave will be?

- a) 1 ms^{-1}
- b) 2 ms^{-1}
- c) 3 ms^{-1}
- d) 4 ms^{-1}

Q.129

To make frequency of spring oscillation four times, we have to:

- a) Reduce mass to one fourth
- b) Quadruple the mass
- c) Reduce mass to one sixteenth
- d) Double the mass

Q.130

Speed of sound is 332 ms^{-1} at 0°C . What will be its value at 10°C ?

- a) 332 ms^{-1}
- b) 338.1 ms^{-1}
- c) 332.61 ms^{-1}
- d) 334.1 ms^{-1}

Q.131

In molar specific heat, the equation $C_p - C_v = R$ shows that:

- a) $C_p < C_v$

- b) $C_p = C_v$
- c) $C_p > C_v$
- d) $C_p = \text{Constant}$

Q.132

The thermodynamic process during which volume of the system remains constant is:

- a) Isothermal
- b) Isobaric
- c) Isochoric
- d) Adiabatic

Q.133

If two capacitors of capacitance $2 \mu\text{F}$ and $6 \mu\text{F}$ are connected in parallel, the equivalent capacitance of combination will be:

- a) $8 \mu\text{F}$
- b) $3/2 \mu\text{F}$
- c) $4 \mu\text{F}$
- d) $13/2 \mu\text{F}$

Q.134

Capacitance of a capacitor does not depend upon:

- a) Distance between plates
- b) Separation between plates
- c) Medium
- d) Metal of plates

Q.135

Power transfer will be maximum when:

- a) $R > r$
- b) $R < r$
- c) $R = r$
- d) $R = 1/r$

Q.136

A wire is stretched so that its radius of cross section becomes half, then resistance of wire will be:

- a) $4R$
- b) $R/4$
- c) $8R$
- d) $16R$

Q.137

When a charged particle enters the magnetic field parallel, it will:

- a) Deflect towards North
- b) Deflect towards South
- c) Move straight
- d) Move in circular path

Q.138

Magnetic flux is maximum when angle between magnetic field and vector area is:

- a) 0°
- b) 90°
- c) 60°
- d) 45°



Q.139 The domestic electricity supply in Pakistan has a frequency of:

- a) 70 Hz
- b) 50 Hz
- c) 100 Hz
- d) 30 Hz

Q.140 The device which increases or decreases the emf is called:

- a) AC generator
- b) Motor
- c) Transformer
- d) DC generator

Q.141 The induced current flow in such a direction so as to oppose the cause that produces it. The statement is:

- a) Ampere's Law
- b) Faraday's Law
- c) Lenz's Law
- d) Joule's Law

Q.142 The device which is used for conversion of AC into DC is:

- a) Amplifier
- b) Rectifier
- c) Diode
- d) Transistor

Q.143 The process of conversion of AC into DC is called:

- a) Rectification
- b) Amplification
- c) Rectifier
- d) Conversion

Q.144 In projectile motion, at maximum height:

- a) $v_x = 0$, $v_y = \text{Constant}$
- b) $v_x = \text{Constant}$, $v_y = \text{Constant}$
- c) $v_x = 0$, $v_y = 0$
- d) $v_x = \text{Constant}$, $v_y = 0$

Q.145 A 32g phosphorus is decayed and 2g remains undecayed after 60 days. The half-life of phosphorous is:

- a) 5 days
- b) 6 days
- c) 10 days
- d) 15 days

Q.146 The SI unit of gravitational potential is :

- a) J/kg

- b) J/(m kg)
- c) J/(m s)
- d) Js

Q.147 In nuclear radiography for medical diagnosis which rays are used?

- a) Alpha particles
- b) UV rays
- c) Gamma rays
- d) X rays

Q.148 Unit of linear momentum is:

- a) Nm
- b) N/s
- c) Ns
- d) Ns^2

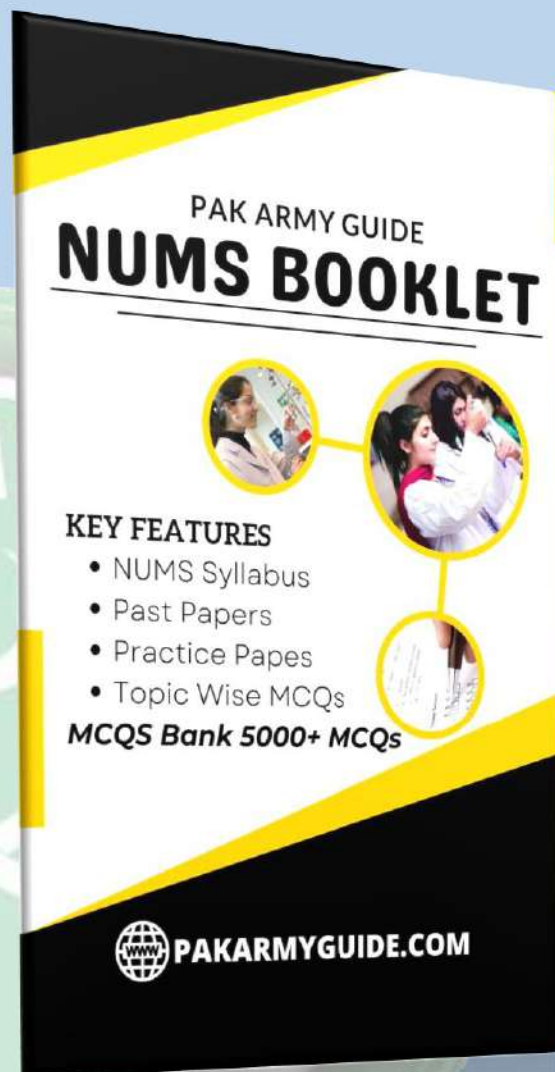
Q.149 General gas equation formula:

- a) $PV = nRT$
- b) $PV = RT/n$
- c) $PV = nR/T$
- d) $PV = nT/R$



48	B	98	B	148	C
49	D	99	B	149	A
50	C	100	C	150	

Q.NO	An-swer	Q.NO	An-swer	Q.NO	An-swer
1	B	51	C	101	B
2	B	52	A	102	B
3	C	53	A	103	C
4	B	54	A	104	C
5	B	55	C	105	B
6	C	56	D	106	B
7	A	57	B	107	A
8	D	58	A	108	B
9	C	59	B	109	C
10	B	60	C	110	C
11	B	61	D	111	B
12	A	62	A	112	B
13	A	63	B	113	C
14	C	64	A	114	B
15	B	65	A	115	B
16	D	66	A	116	C
17	D	67	C	117	D
18	C	68	D	118	A
19	D	69	C	119	C
20	A	70	A	120	C
21	A	71	D	121	B
22	C	72	B	122	A
23	A	73	D	123	C
24	A	74	A	124	C
25	A	75	B	125	B
26	D	76	B	126	B
27	C	77	C	127	B
28	B	78	D	128	A
29	A	79	B	129	C
30	D	80	B	130	B
31	A	81	A	131	C
32	C	82	C	132	C
33	D	83	B	133	A
34	C	84	A	134	D
35	A	85	D	135	C
36	D	86	C	136	D
37	C	87	A	137	C
38	A	88	A	138	A
39	C	89	C	139	B
40	C	90	C	140	C
41	D	91	D	141	C
42	D	92	A	142	B
43	B	93	C	143	A
44	B	94	A	144	D
45	C	95	C	145	D
46	C	96	A	146	A
47	A	97	D	147	C



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